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ABSTRACT

The ability to describe existence through speech and to change that existence through tools are among the most fundamental characteristics of humans. From the first efforts of humans to communicate--using hieroglyphic and pictographic systems of writing--through the development of the phonetic alphabet, to the emergence of computer technology, humans have used communication tools or technologies to change the ways they describe their existence. While communications media have now clearly gone far beyond the powers of unadorned speech, the spoken word nonetheless has served as the focus and goal of media evolution. The immense powers of abstraction set loose by speech have made complex inventions possible, and the spoken word functions as a gateway for all technological enterprises. Thus, the evolution of media has been truly guided by the invisible hand of speech. (FL)

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MEDIA EVOLUTION AND THE PRIMACY OF SPEECH

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MEDIA EVOLUTION AND THE PRIMACY OF SPEECH

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The ability to describe our existence through speech and to change our existence through tools are among the most fundamental characteristics of the human organism. In this brief paper, I will sketch the development of the fusion of these two abilities -- i.e., the ability to change the ways we describe our existence, through tools of communication or communication technologies -- and I will show that while communications media obviously have gone far beyond the powers of unadorned speech, the spoken word nonetheless has served as the focus and goal of media evolution. I further will suggest that the immense powers of abstraction set loose by speech have made complex inventions possible, and that the spoken word functions as a gateway for all technological enterprises. In these senses, then, the evolution of media truly has been guided by the invisible hand of speech.

To the extent that necessity is the mother of invention, we would expect the first communication technologies to do what speech itself cannot -- namely, provide an enduring record of the subject of conversation. The early pictographic and hieroglyphic type of writing systems succeeded admirably in this task, as the large number of surviving records of ancient civilizations attests. But pictographs achieve their permanency not by adding to or augmenting the advantages of speech, but by in effect ignoring speech and proceeding in another direction. Thus, while early writing systems were able to provide permanent records of communication, these systems lacked the flexibility of the spoken word and were not as able to convey complex levels of abstraction. How, for example, could a word

such as "concept" be pictographically recorded? Pictographs are merely highly stylized visual representations of the visual world -- visual signals -- which have little in common with the acoustic symbol systems of speech. The invention of the phonetic alphabet changed all of this.

Much has been written about the phonetic alphabet and its impact on civilization (e.g., McLuhan, 1962; Havelock,1976), but here we need note only that the alphabet constitutes the first major shift in the evolution of media towards a recapturing of some of the human elements of speech. For while the alphabet provides the permanency of communication that speech does not, the alphabet renders its recordings in a way that is almost as flexible and as fully symbolic as the spoken word. With the visual representation of spoken sounds that is the phonetic alphabet, then, we get a recording not of experience, but of experience as filtered through the medium of speech. We get, in other words, permanency plus acoustic flexibility and abstraction.

There of course are many ways in which the alphabet is markedly unspeechlike. A major one of these was remedied by the advent of the printing press, which created for the alphabet a type of simultaneous (or nearly simultaneous) mass audience previously enjoyed only by speech. Thus, with print, as one contemporary put it, "just as one voice can be heard by a multitude of ears, so single writings cover a thousand sheets" (reprinted in Agassi, 1968, p. 26). In giving the written word a type of accessibility comparable (and of course in many ways superior) to the spoken word, the print revolution marks the second major step in the "speechification" of communications technologies.

With the age of invention in the 19th century, the pace picks up. The telephone allows people to converse across the planet as if they were face to face in a room. The phonograph at last provides not a recording of speech through visual representation, but a direct recording of the spoken sound itself. A bit later on, radio creates a true simultaneous mass audience on the national level; and with the launching of telecommunications satellites in the middle of the 20th century, the first global mass audience comes into being.

In these and virtually all other modern communication technologies, speech serves not only as the content but as a model for the technology's structure or performance: modern technologies thus foster communication environments in which information is immediately and simultaneously accessible to large numbers of people in the same way that "pre-technological" oral communication makes information available to anyone in earshot of the speaker's voice. As to the content of 19th and 20th century technologies, the still photograph is the only medium that does not directly or indirectly entail the spoken word, in a list that includes the telegraph, telephone, phonograph, motion photography, radio, and television. Computers that speak are but the latest refinement in this long evolution.

Of course, the advanced communications technologies of the present not only replicate the characteristics of the spoken word, but offer the decidedly non-speechlike elements of permanency (extension across time) and global range (extension across space). The thrust of media evolution, then, has been not only to recreate speech and its environment, but to remedy the limitations of the spoken word which motivated the earliest

media such as hieroglyphics. Or, as I explain in greater detail in my Human Replay (1979), we might say that the evolution of media has been a continuing progression from technologies that transcend the limitations of speech by ignoring or disfiguring the spoken word, to technologies that transcend spoken limitations while preserving all other oral characteristics.

But how is it that we humans have been able to devise such ingenious tools of communication, that allow us to talk across the world (and beyond the world, in the case of the moon landings) with the ease that we might speak to our next-door neighbor? It is a fascinating fact that in order to achieve such ease of communication, we need scientific theories and technologies that are increasingly complex. Put in terms of formal communication theory, we might say that the simpler the decoding of technological messages (as is the case with media that provide us with literal words and images, such as television), the more complex or sophisticated need be the technological encoding apparatus (the construction of a video system requires a far greater degree of scientific knowledge than the construction of a writing system). The "humanization" or "speechification" of communications, in other words, requires an awesome increase in our scientific knowledge -- an increase which, it turns out, has been possible primarily due to speech and its offspring.

Philosophers from Socrates to Karl Popper have recognized speech as the preeminent medium of the human intellect. Popper, (e.g., 1972/79) in particular, has pointed out that speech allows us not only to describe and explain, but to criticize and thus develop ideas that may occur to us. With speech we go beyond the realm of immediate perceptions and individual objects to generalizations and principles that describe the relation of these

events -- that is, we leave the realm of the world and enter the realm of theories about the world, which may then measured against the world as to their truthlikeness and falsity. Although abstract generalizations of states not physically present (such as the notion of the species "lion," as opposed to the individual lion or lions that we see in the world) may have been possible before the advent of the spoken word, such abstract notions would have done their proto-human originators little good since, in the absence of speech, the communication of such notions would have been all but impossible. Speech thus invents the process, if not of abstract critical thinking, at least of abstract critical communication; and subsequent speech-derived media such as the alphabet, printing press, etc. give this critical communication a permanent, expanding base.

The evolution of media thus seems not only directed towards a recreation of speech and its characteristics, but made possible by the explosion of knowledge that speech and abstract communication set off. But that's not all.

For in addition to guiding and fueling the evolution of communications technologies, the act of speaking may serve as a primary portal or archway for all technological phenonema, communication and otherwise. If we investigate the nature of technology, we find that technology is at basis a materialization of substantiation of human ideas -- that is, technology is an embodiment of human ideas in the material world (for more on this, see my 1982). Yet before our ideas are actualized or materialized in the external world, they almost always are first externalized in the process of speech. Thus we might say that the technology of

space travel, for example, begins with an idea in the human mind, enters the world via speech (through which it may be criticized, refined, etc.), to eventually become actualized in a Mariner rocket or whatever. This progression, of course, is equally the case with communications technologies. Thus we might say that speech is the doorway through which ideas that become technologies first enter the outside world.

Our means of communication therefore have been shaped by speech in the triple sense that media are becoming more speech-like, due to technologies made possible by the knowledge of the world that speech engenders, and with these technologies achieving first external expression as spoken ideas. The activity of speech, the primordal medium of self-reflection, continues its self-reflexive performance as it uncoils and recoils through the evolution of humans and media.

References

Agassi, Joseph. The Continuing Revolution. New York: McGraw-Hill, 1968.

Havelock, Eric. Origins of Western Literacy. Toronto: Ontario Inst. for Studies in Education, 1976.

Levinson, Paul. Human Replay: A Theory of the Evolution of Media. Ph.D. diss., N.Y.U. Ann Arbor, MI: Univ. Microfilm Int., 1979.

Levinson, Paul. "What Technology Can Teach Philosophy." In Paul Levinson (Ed.) In Pursuit of Truth: The Philosophy of Karl Popper. Atlantic Highlands, NJ: Humanities, 1982 (forthcoming).

McLuhan, Marshall. The Gutenberg Galaxy. New York, Mentor, 1962.

Popper, Karl. Objective Knowledge. New York: Oxford Univ., 1972/79.